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ABSTRACT

The report describes the planning, development, implementation, and evaluation for the 1973-74 school year of a pilot program in career education for an inner city middle school. Career education was infused into the ongoing curriculum in a team-taught interdisciplinary approach. Career clusters were related to the major academic areas utilizing community resource personnel in the school setting, while field trips provided first-hand experience. Parents participated by assisting with clerical duties, accompanying students on field trips, and sharing personal work experiences. Interest surveys and occupational cluster pretests were administered to all students. In program assessment, some of the techniques employed were: evaluation of student's participation, staff meetings, participation and response of parents, community participants' critique, and pretesting and posttesting of student participants. A considerable majority of students improved their scores on the career clusters posttests. The pretests for each of the eight clusters are appended, along with the student preprogram inventory, and the staff and parent questionnaires. (NJ)

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CAREER EDUCATION PROGRAM
TROUP MIDDLE SCHOOL

FINAL REPORT

Vincent M. Gagliardi
New Haven Board of Education
200 Orange Street
New Haven, Connecticut 06510

July 1, 1975

CONNECTICUT STATE DEPARTMENT OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
RESEARCH AND PLANNING UNIT
HARTFORD, CONNECTICUT

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VT 102536

NEW HAVEN DEPARTMENT OF EDUCATION
CAREER EDUCATION PROGRAM
NEW HAVEN, CONNECTICUT

PROGRAM PERSONNEL

Directors	Dr. Gerald Tirozzi, Director of Middle Schools Mr. Earl Gordon, Supervisor of Guidance Mr. Isadore Wexler, Supervisor of Career Education Mr. Vincent M. Gagliardi, Program Director Mr. Mark L. Fisher, Program Assistant Director
State Department of Education	Dr. Saul H. Dulberg Mr. Fred Haddad
Troup Middle School Staff	Mr. William Beaty, Jr., Principal Mr. Reginald Mayo, Assistant Principal Mr. Ronald Maresca, Assistant Principal
Teacher Participants	Mrs. Joyce Bryant Mr. Barton Cherry, Team Leader Mrs. Carolyn Cooper Mrs. Barbara Puglisi Mr. Ronald Comen, Team Leader Mr. Bryan Laich Mr. William McDonald Mrs. Pamela O'Neal
Counselor	Mr. Mark L. Fisher
Project Secretary	Mrs. Ruby Blue

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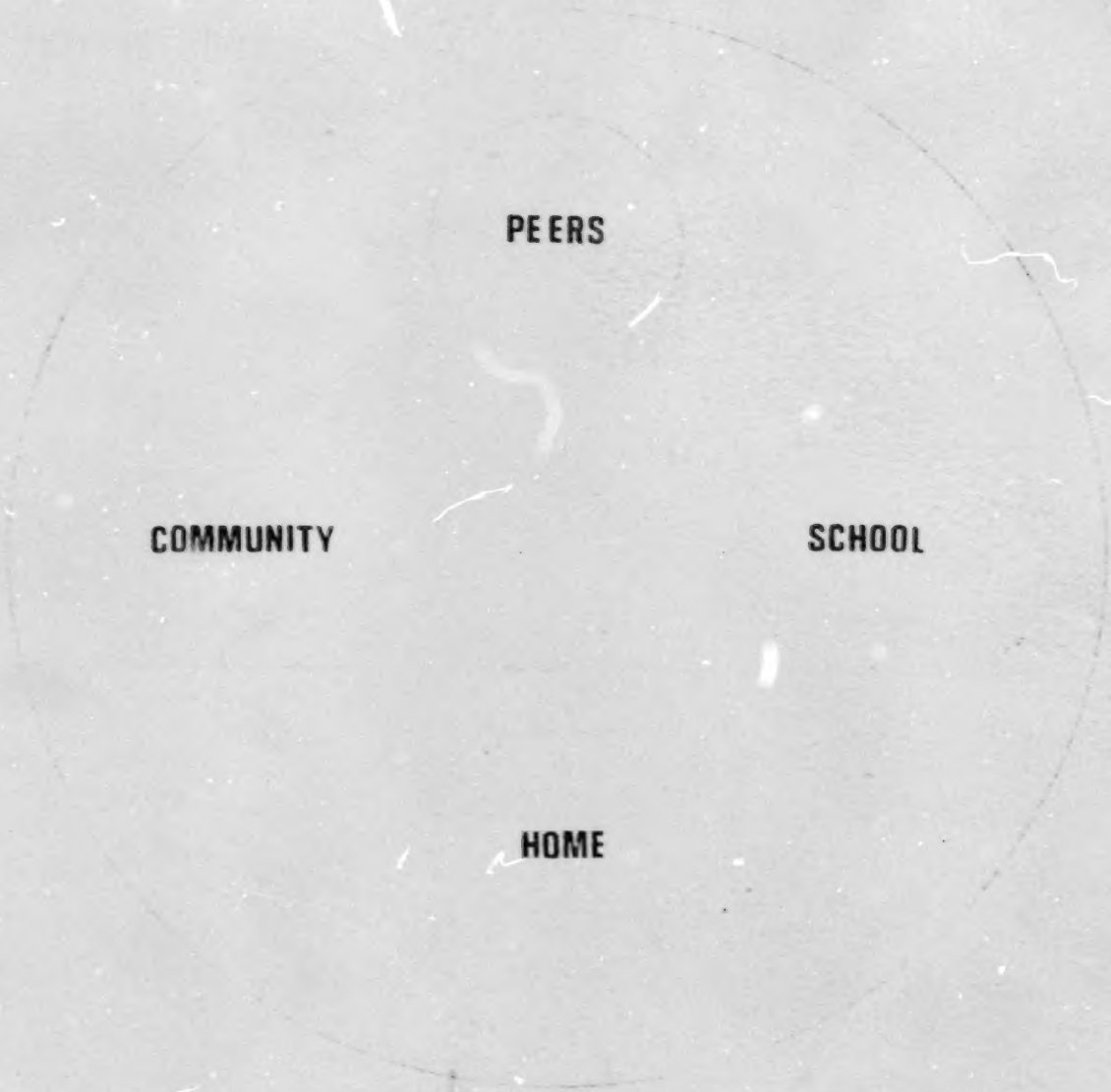
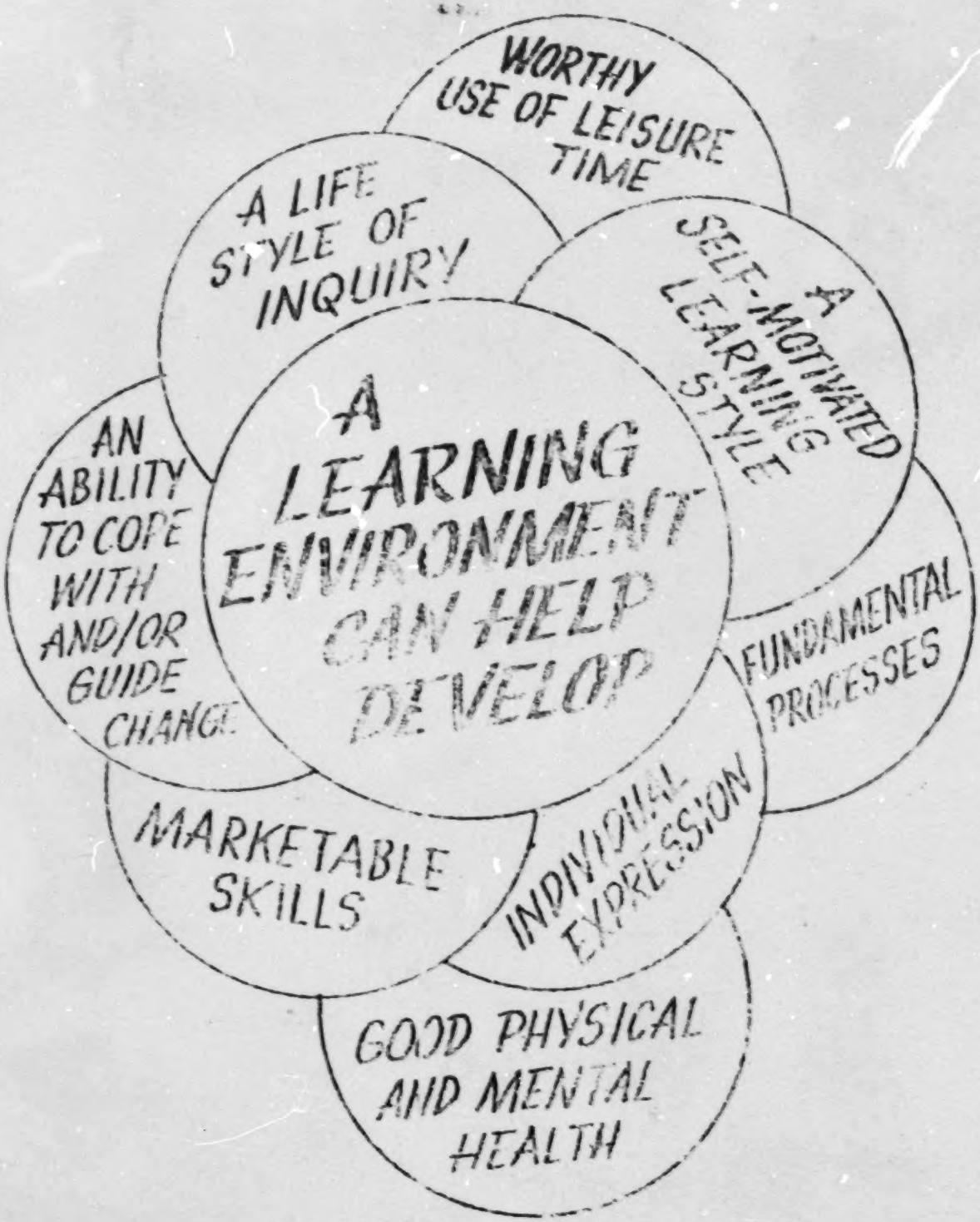
THE STUDENT'S WORLD




WORTHY USE OF LEISURE TIME
A LIFE STYLE OF INQUIRY
A SELF-MOTIVATED LEARNING STYLE
AN ABILITY TO COPE WITH AND/OR GUIDE CHANGE
A LEARNING ENVIRONMENT CAN HELP DEVELOP
FUNDAMENTAL PROCESSES
MARKETABLE SKILLS
INDIVIDUAL EXPRESSION
GOOD PHYSICAL AND MENTAL HEALTH

PREFACE

New Haven has always given high priority to the needs, aspirations, and interests of its students as they relate to immediate and long range career planning. During the 1972-1973 school year, New Haven was fortunate, through the sponsorship of the Connecticut Division of Vocational Education, to present a series of Career Education workshops for administrators, counselors, and teachers of its elementary and middle schools. The sessions were well received and highly motivational.

As a direct result of these workshops, a group of teachers at Troup Middle School, an inner-city school housing seventh and eighth graders, submitted a proposal for a pilot effort in Career Education to the Division of Vocational Education.

This program has become New Haven's pilot program in the total implementation of a K-12 Career Education Program.

This report will describe the comprehensive and sequential planning, development, implementation and evaluation of this initial effort, during the 1973-1974 school year, and its continuance and extension in the 1974-1975 school year.

New Haven is highly indebted to the New Haven Chamber of Commerce, the Urban League of Greater New Haven, and the New Haven Advisory Committee for Career Education for their many efforts.

Mr. Earl Gordon, Supervisor of Guidance and Mr. Isadore Wexler, Supervisor of Career Education have been instrumental in the shaping and development of the Program, since its inception. Dr. Gerald Tirozzi, Director of Middle Schools, is a most valued advocate of the Program as evidenced by his numerous actions in its behalf.

The Troup Middle School Community Council, Mr. William Beaty, Jr., Principal, Mr. Reginald Mayo, Assistant Principal, and Mr. Ronald Maresca, Assistant Principal, have made the infusion of the Career Education at Troup a very exciting educational reality.

Many of the New Haven School Personnel from Superintendent of Schools, Dr. George A. Barbarito, to Mark L. Fisher, CEP Assistant Director, to Mrs. Ruby Blue, the Program Secretary, have contributed directly towards the Program's modest success.

We acknowledge the professional assistance of Dr. Saul H. Dulberg, Consultant and Program Developer, Career Education, Division of Vocation Education, Connecticut State Department of Education and Fred Haddad of the Research Coordinating Unit.

SUMMARY

The Career Education Program functions at Troup Middle School, located in New Haven in an inner-city neighborhood, serving its immediate community and the Hill-Model Cities community as well. Classes are grouped in a modified house plan, utilizing teacher team leaders as resource persons and facilitators. One hundred seventh grade students from all "feeder" schools were selected at random to participate in the Program. Approximately one hundred eighth graders comprise the original C.E.P participants. A total of two hundred participants are served. The composition of student groups is heterogeneous in nature. The career clusters being explored in depth are Business/Office, Communications/Media, Health, Transportation, Consumer/Homemaking, Fine Arts/Humanities, Environment and Manufacturing.

The Program objectives are:

1. To enable a majority of participants to develop a realistic self-appraisal of their ability to fit into specific career areas by their performance on both standardized and non-standardized instruments.

2. To provide the majority of participants with increased knowledge and understanding of career opportunities and to develop, as well, their ability to formulate and critically assess work values.

3. To provide increased awareness of Career Education for the entire Career Education Program Staff and the majority of the Troup Middle School general staff by means of a process of orientation involving workshops, resource people and research.

4. To provide the majority of the participants' parents and community residents with increased awareness of the concepts of career education.

By a process of career infusion, clusters were related to the major academic disciplines utilizing community resource personnel from Business-Industry-Government in the school setting. Group visitations to cooperating institutions allowed participants to explore first hand clusters researched in school. Student activities, such as video-taping exemplified learning experiences of career cluster units, which were team taught.

It may be concluded that New Haven's pilot endeavor in Career Education at Troup Middle School was a positive experience for student participants, participants' parents, community co-participants, school supervisors and administrators, and the Career Education Program Teacher Team. Student attendance has been improved, disciplinary referrals diminished significantly, achievement advanced, and learning made 'fun".

It is recommended that a cross section of people be involved in planning and implementation; home-community-school. A clear and sequential number of evaluation is critical to Program development and improvement. Lines of communication at all levels, involving all co-participants are essential to continuity and clarity. Recognition of the efforts people involved contributes proportionately to morale at every level of endeavor.

BACKGROUND

The target groups served are students who are predominantly residents of the Hill-Model Cities area. This area has been chosen as one of the Model Cities Demonstration areas by H.U.D., and is characterized by overcrowded living conditions (31.7% by a Community Progress, Inc. survey), substandard housing (15% of the Whites, 42% of the Blacks, and 38% of the Puerto Ricans), and a low educational level of 9.9 median years of schooling. The percentage of families with a yearly income of less than $4,000 was 29% according to a 1967 special census, and C.P.I. estimates that approximately one out of every three households in the Hill area receives some form of public assistance. Since a majority of students come from the Hill, they can be considered disadvantaged regardless of the criteria used.

Many Troup students have not developed self-awareness. They lack information of the broad world of work. These students have had no real contact with actual work experiences, and "hands on" experience. They have not appraised themselves in terms of their abilities to fit into specific career areas. They have not been exposed to decision-making processes in previous school experiences.

The Troup Middle Community School is located in an inner-city neighborhood, serving its immediate community and the Hill-Model Cities Community, as well. A significant majority are Black and Puerto Rican students. The school which houses approximately 900 students in grades seven and eight, groups in a modified house plan, utilizing teacher team leaders as resource persons and facilitators. The administration is led by the principal, two assistant principals, a head counselor, an English-Social Studies department head, a Math-Science department head, a seventh grade teacher-leader, and an eighth grade teacher-leader.

The scope of the Program over a three year projection is as follows:

Phase #1 Exemplary Project implementation with Grade 7 at Troup Middle School during the 1973-74 school year (4 career clusters).

Phase #2 Project to continue with Grade 7 and incorporate Grade 8 at Troup Middle School during the 1974-75 school year, (8 career clusters). Segments of the C.E.P. have been incorporated at Sheriden Middle School.

Phase #3 Project to continue with Grades 7 and 8 at Troup Middle School during the 1975-76 school year. The Program will be fully implemented in two additional New Haven Middle Schools at the seventh grade level. A sixth grade component of the Program will be incorporated at a fourth New Haven Middle School during the 1975-76 school year. Effort will be made to expand the Program to other schools in the system.

A three year comprehensive and sequential project implementing career clusters will be developed. The span of the project would relate to middle, and high schools (where career programming is extensively operative).

At the conclusion of the three year period, an extensive follow-up study can be made of the original experimental participants.

METHODS

Consultation-State Department of Education

As a direct result of ten workshops presented in New Haven in Career Education during the 1972-1973 school year, several proposals were considered by New Haven staff for submission to the Connecticut Division of Vocational Education.

Several successful programs already operational at the high school level gave much thought to critical consideration of the merit of both elementary and middle school proposals.

Dr. Saul Dulberg and Richard C. Wilson of the Connecticut Division of Vocational Education were extremely helpful in assisting the New Haven group to assess local needs and project future direction in program planning.

Ultimately, the New Haven team decided to submit a Letter of Intent for a proposal of a Middle School Career Education Program to operate at Troup Middle School. This would allow for lateral growth in both elementary and secondary programming. After several revisions of the Letter of Intent, C.D.V.E. invited New Haven to submit a formal proposal.

This final report is a continuing summary account of that Troup Middle School Career Education Program.

Administrative Planning

The success or failure of such a Program would be directly affected by the priority and direction given by the Troup Middle School Administrative Staff. It was apparent from its inception that Career Education at Troup would be a viable educational experience.

Dr. Gerald Tirozzi, the Director of Middle Schools, Mr. William Beaty, Principal, Mr. Reginald Mayo, Assistant Principal, Mr. Ronald Maresca, Assistant Principal, and Mrs. Thelma Cross, Head Counselor each in many unique ways have directly assisted in the planning, implementation, and evaluation of the Program. Their collective and individual efforts have been a critical program ingredient.

Supervisors

To make a Career Education Program relevant to what was presently the learning experience in a Middle School of approximately 900 students was a gargantuan undertaking. However, consultation and input by the New Haven Supervisors made this thrust in career education a very positive experience for many. They searched, and projected needs, objectives, activities, resources, and evaluation. Very careful consideration was given to which of the fifteen career clusters would be most relevant to the learning experiences at the seventh grade level. These clusters are: (1) Agri-Business/Natural Resources (2) Business/Office (3) Communications/Media (4) Consumer/Homemaking (5) Construction (6) Environment (7) Fine Arts/Humanities (8) Health (9) Hospitality/Recreation (10) Manufacturing (11) Marine Science (12) Marketing and Distribution (13) Personal Services (14) Public Service (15) Transportation.

It was decided that the four clusters that would have relevancy to the academic disciplines at the seventh grade level would be:

Communications/Media (English)
Transportation (Social Studies)
Business/Office (Math)
Health (Science)

At this time, consideration was also given to future programming and projection. The supervisors who served as consultants are:

Charles Deafenbaugh - Science
Earl Gordon - Guidance and Counseling
Donald Grava - Business Education
Kathryn M. Jones - Home Economics
Harry Levitin - Mathematics
Dr. Albert Seretny - Social Studies/English
Leonard Taddei - Industrial Arts
Isadore Wexler - Career Education

Recommendations for eighth grade career clusters having relevancy to the academic disciplines were:

Fine Arts/Humanities (English)
Manufacturing (Social Studies)
Consumer/Homemaking (Math)
Environment (Science)

Advisory Councils

Members of the New Haven Chamber of Commerce, the Urban League of Greater New Haven, the New Haven Advisory Committee for Career Education the New Haven Labor Council, and the Troup Middle School Community Council serve on the C.E.P. Advisory Board.

Advisory Councils composed of people in the Business-Industry-Education-Government community serve the individual career cluster components of the Program.

As Council members, they contribute by planning, assessing, identifying resources, and evaluating. Their expertise in the specific occupational areas is a major contribution to Program content. They give freely and energetically of their talents and enthusiasm.

The Advisory Councils are as follows:

Business/Office Cluster

Ralph Hylton - New Haven Chamber of Commerce
Howard Tuttle - Second New Haven Bank
Richard Cannon - Olin Corporation
William Gilpin - Metropolitan Life Insurance Company
F. P. Wilson - First New Haven National Bank
Donald Grava - Supervisor-Business Education, New Haven Schools
Harry Levitin - Supervisor-Math, New Haven Schools

Communication/Media Cluster

Mary O'Leary - New Haven Journal Courier
William Ellison - WTNH-TV 8
Sherill Adams - WELI Radio
Evelyn Skelly - Southern New England Telephone Co.
Frank Hepler - Hepler & Gibney Advertising Agency

Health Cluster

Monte Bailey, Institute of Allied Health Careers
Paul Taylor, St. Raphael Hospital
Mrs. Bebe Sise, New Haven Rehabilitation Center
Courtland Wilson, Yale-New Haven Hospital
Mrs. MaryLou Breitenstein, Quinnipiac College

Transportation Cluster

D. S. Macedo, Gulf Oil Corporation
William McKernan, Penn Central Railroad
Kenneth Conroe, Jet Fuel Lines, Inc.
Edward Sutton, Sikorsky Aircraft
Edgar Schoonmaker, Tweed-New Haven Airport
Cal Brown, New Haven Trap Rock Co.

Fine Arts/Humanities Cluster

Jim Alexander, F.A.C.T
Ms. Bobby Groves, Pottery Instructor
Dr. Robert Kendall, Southern Connecticut State College
Albert Mortali, Portrait Artist
Ms. Nancy Piccione, Long Wharf Theatre

Manufacturing Cluster

Ms. Barbara Connelly, Southern New England Telephone
Ms. Nancy Delgano, Peter Paul Co.
Mr. R. Hadelman, Bache & Co.
Bill O'Sullivan, W.E.L.I
Richard Maconi, Kiwanis Club
Ralph Pannone, Sargent Co.
Edmund Wysocki, Junior Achievement

Consumer/Homemaking Cluster

Ms. Christine Bernard, Interior Decorator
Richard Capobianco, New Haven Credit Bureau
Mr. A. Cope, J.C. Penny Co.
Ms. Betty Demko, I.R.S.
Albert Dobey, Yale University Dining Halls
Joseph McAlpine, Southern Connecticut Gas Co.
Douglas Shaw, Wise Cleaners

Environment Cluster

Charles Barr, Connecticut Tree Protection Association
Edward Brewer, Traffic & Parking Division - City of New Haven
Carmine DiBattista, Environment Unit - New Haven Health Dept.
E. Gamble, Engineering Dept. - City of New Haven
Michael Leon, Conn. Department of Environmental Protection

Staff Selection

A director and assistant director were appointed to serve the Program. The director is charged with all administrative responsibilities of the Program. He also serves as Career Education Program Developer for New Haven Elementary and Middle Schools. Included in his responsibilities are Curriculum, Staff, Budget, Program Evaluation, and Public Relations. He reports to the Supervisor of Guidance, the Supervisor of Career Education, and the Troup Principal.

The assistant director, who also serves as Program counselor is charged with all day-to-day administrative responsibilities. His responsibilities include all pupil personnel activities, as well as immediate administrative tasks. He functions as a curriculum resource person and serves as a liaison with participating Business-Industry-Education-Government institutions.

Teachers interested in career education indicated their intentions to the Troup Principal in March of 1973. They were, then, interviewed by a selection committee. Those selected participated in a pre-program orientation in August of 1973, prior to the Program beginning in September. This teacher team continued with eighth grade participants during the 1974-75 school year. Additional teachers were interviewed and screened by the selection committee and participated in a pre-program orientation in August of 1974. This team has led the seventh grade unit of student participants.

Secretaries interested in the clerical position were interviewed by the Program Director and selected on the results of clerical screening and personal interview. The Program Secretary has continued in this position.

Special Qualification of Staff

Director

A. Experience in teaching
B. Diversified work experience
C. Formal study in economics, psychology, curriculum and administration
D. Demonstrated success in personal relationships
E. Demonstrated success in administration

Assistant Director-Counselor

A. Experience in teaching and counseling at the middle school level
B. Diversified work experience
C. Formal study and certification in guidance and counseling
D. Demonstrated success in personal relationships

Teaching Staff - English Teacher, Social Studies Teacher, Math Teacher, Science Teacher

A. B.S./B.A. - M.A. - Subject Field
B. Teaching Experience - 3 yrs. (minimum)
C. Work Experience - Varied
D. Demonstrated success in an inner-city middle school
E. Preference - From Troup Middle School Staff

Staff Secretary

A. High School Graduate
B. Some post-secondary training
C. Over 21 yrs. of age
D. Experience - 2 yrs. (minimum)
E. Ability to type, use office machines, keep accounts, office management
F. Preference - Experience in school system

Ratios

Teacher-Pupil Ratio

Teachers	Pupils	Ratio
8	195	1:24

Counselor-Pupil Ratio

Counselor	Pupils	Ratio
1	195	1:195

Adjusted Ratio

Of the original 105 students, fifteen students transferred to schools within the system, in the state, and out of state. No requests were made for transfer out of the program. One hundred new students were admitted to the Program for the 1975-76 school year. Adjusted ratios at the conclusion of the second year are:

Teacher-Pupil Ratio

Teacher	Pupils	Ratio
8	190	1:23

Counselor-Pupil Ratio

Counselor	Pupils	Ratio
1	190	1:190

Collateral Teacher Duties

Career Education Program teachers are assigned one period per day of collateral duty. This duty may entail attendance, corridor supervision, and cafeteria assistance.

Teacher Team Meeting

The Career Education Program Teacher Team meets three times a week. A Program teacher functions as Team Leader and chairs all meetings. The Program counselor, who also doubles as the Assistant Project Director at Troup is in attendance at all team meetings. The team meeting serves a multiplicity of purposes.

Pupil Planning and Placement conferences are held with School System personnel. Program logistics and planning occur. Curriculum content and evaluation are reviewed. Cluster Advisory Council meetings are held at this time. Program staff development sessions are held. Previewing of commercial media material is done. Research is completed at this time. Classroom materials and projects are prepared. Teacher effectiveness sessions with B.E.S.T. staff from the University of Bridgeport and T.O.R.I. sessions with Quinnipiac College staff both proved vitally important in-service programs. "Think tank", "brainstorming", "buzz" and gripe sessions all prove beneficial to Program improvement and staff morale.

Career Cluster Orientation

An in-depth study of Business/Office, Communications/Media, Health, Transportation, Consumer/Homemaking, Fine Arts/Humanities, Environment, and Manufacturing clusters is made on a seven week each basis. The remaining 7 clusters of the 15 U.S.O.E. recommended grouping are explored by Program Staff members in a modified technique during homeroom periods, utilizing media materials, Career Newsletter subscriptions, printed materials, and research. Group General Staff Teachers of Reading, Music, Art, Band, Home Economics, and Industrial Arts meet with C.E.P. Staff regularly and are infusing career materials in their classrooms.

Troup Personnel

The Program secretary serves the immediate and extended needs of the Program, its student participants, and its professional staff. Her many and diversified duties include correspondence, appointments, copying, test scoring, bookkeeping, material ordering, inventory, personnel reception, etc.

Troup general staff who serve participating students and staff are: Community School Coordinator, Nurse, Social Worker, Outreach Worker, Audio-Visual Coordinator, Attendance Worker, Reading Teacher, Itinerant Speech Therapist.

Student Selection

During the summer of 1973, the Head Counselor at Troup, Mrs. Thelma Cross, identified at random 100 boys and girls from the various communities which "feed" students to the Troup Middle School. Incoming student participants came from Scranton, Barnard, Winchester, Truman, Day, Edgewood, Sherman, Dwight, Baldwin, and Trowbridge Schools. An identical procedure was followed during the summer of 1974 for incoming students.

This group of students, selected from approximately 450 incoming seventh graders, is representative of all ability levels, racial and ethnic backgrounds, economic and social strata, and personalities in the school.

School-Program Philosophy

The philosophy of the Career Education Program is consistent with the philosophy of Troup Middle School.

The needs of the student and his personal desires must be in balance with the needs of society, represented in this instance by the institution we call the 'school'. The student's concept of himself in relation to society reflects how he sees that society relating to his individual as well as peer group needs. All community, educational system, and available agencies resources are open to participating students in the Troup Career Education Program which are consistent with their collective philosophy.

Scheduling

The Troup Middle School administration, manifesting, commitment and concern, block scheduled all participants in a five period block (including lunch) from 8:30 A.M. to 12:30 P.M. This type scheduling allows for a team approach to cluster content. Teachers collectively plan their time blocks on any modified basis. Cluster activities, resource speakers, simulations, field visitations, and research are readily accomplished in this fluid time block.

Teacher team meetings are held between 12:30 and 3:00 on a rotating basis.

Parental Involvement

Parents of student participants were invited to an orientation and social held on August 15, 1974. A parent questionnaire and survey was given at that time. Surveys were mailed to those parents unable to attend. The results of the survey were analyzed in terms of reactions, response, and resource. The staff has taken advantage of the positive response of parents by inviting their assistance with clerical tasks and to accompany student participants on visits to Business-Industry-Government-Education institutions. Many parents have been invited to share their own personal work experiences with the students.

Parents of participants are involved with the Troup Community Council; Mrs. Fannie Brooks, the parent of a C.E.P. participant, serves as President of the Council. An Open House was held on June 16, 1975 for parents and participating community resource personnel. Parents were pleased to meet the cooperating representatives of institutions which served the Program.

Personal conferences with parents and continued communication with the home of student participants has clearly made a difference in home-school rapport. The success of attempts to involve parents is keyed to personal contact.

Facilities

A four room wing on the second floor of Troup Middle School has been made available exclusively for the use of the Career Education Program - grade 8 component. The seventh grade component of the Career Education Program is housed in a four room wing on the third floor directly above the grade eight unit. Additionally, an adjoining classroom has been converted to serve as the Resource Center for the Program. This Center, which houses the Project Secretary, is readily available to Program participants and staff for preview of materials, discussions, research, and team meetings. Audio-visual equipment is secured in the Center under strict control. The Project counselor's office and conference area also adjoin the wing and is ideal for confidential and open conferences with both individuals and small groups.

Convenient to the School Library, Cafeteria, and Auditorium; the Career Wing is ideally situated. Ingress and egress of student groups occur with minimal interruption.

Public Relations

Communication with the various publics served by the Program is diligently maintained. A change factor in communications was a high priority in Program planning. Periodic reporting of activity and progress is made to the State of Connecticut, to Advisory Councils, School Administration, Cooperating Community Participants, Parents, and Teacher peer groups.

The Career Cluster in Communications/Media allowed the staff to make many friends and learn much of public relations-advertising and other forms of informing. Numerous articles in the press, a radio spot, student appearance on a TV show, TV coverage of the Transportation Cluster, notices in the Superintendent's Bulletin, and several workshops conducted by Career Education Program Staff have all graced the Program with an image.

Exemplary Features

The primary function of exemplary programs is to broaden occupational aspirations, with special emphasis to youths with socio-economic, academic handicaps.

The exemplary features of the Troup Middle School Career Education Program are :

1. The Program is truly innovative in that the approach utilized is a team taught interdisciplinary infusion of career education into ongoing curriculum.

2. Parents of participants and community residents are an integral and essential ingredient in the Program.

3. The Business-Industry-Government-Education community is actively involved.

4. Student Self-Assessment and Self-Appraisal experiences are an important aspect of the Program--not an added incidental.

5. A creative introduction to the fifteen major career clusters has characterized the orientation process.

6. On the site, "first hand" experiences are consistent in all activities of the Program.

7. The Career Education Resource Center serves the entire school system, Troup Middle School in particular--as well as the Program itself.

8. Dissemination of career cluster curriculum guides and results of evaluation have been written into the design of the Program.

9. A three year projection at the inception of the Program anticipates a sequential and comprehensive infusion from grades 6 through 8 during this period. This span of grades involves a 'model' of transition from elementary school, to middle school, to high school, where a highly regarded (nationally) career education program is operational.

10. The majority of student participants served by the Program are disadvantaged. The results (intended) of the Program exposure will motivate student participants to aspire to greater occupational goals.

Cluster Approach

Of paramount importance in approaching the career clusters is the awareness on the part of student participants of:

Who am I?

How does my peer group perceive of me?

What are my values?

Where am I going in life?

Activities and learning experiences to respond to these student needs are provided; interest surveys, youth needs profile, growth situations, gaming and simulations, role playing, and decision-making sessions.

The innovative and creative approach to career cluster inclusion in curriculum presented no problem of student motivation. Following the initial period of Pre-Program surveys and orientation, specific career clusters were introduced (see Appendix). The cluster approach stressed a general overview, exploring major divisions or categories of occupations, life style of workers, training, opportunities, and advancement. The cluster Advisory Councils were instrumental in identifying qualified and interesting personnel in each cluster to share, in the school setting, their unique experiences in their particular field. The most gratifying part of these opportunities is the dialogue between the resource person and the students. The majority of the institutions represented by resource personnel in the school, also invited student participants to their facilities. The group size varied from an individual student, to all Program participants. For example, one student spent an entire day with a newspaper reporter. The entire student group visited a major office complex.

Cluster Curriculum Development

The design of the Career Education Program Curriculum is consistent with the needs of the age group for which it is intended. The considerations for content are made with regard to social needs, educational needs, physical needs, emotional needs, moral needs, and cultural needs. Developmental processes of the participant group are critical considerations in the planning and implementation phases.

A thorough study was made of the target group of student participants, clusters to be implemented, available resources, and evaluation techniques. The Area Cooperatives Educational Services (New Haven) and Career Education Resource Center (Bridgeport) have been utilized extensively in research, particularly the ERIC searches.

Assistance from both S.D.E. consultants and a private firm, Education Research Associates, has been received in the planning and presentation phases of the Program.

New Haven School System Personnel are integrally involved throughout the Program phases.

The importance of the Advisory Councils in shaping the Program cannot be stressed sufficiently; they are the essence of it.

Activities

Essentially, activities of C.E.P. student participants are relevant and skill producing. Learning experiences supplement and complement traditional classroom activities.

Educational needs of participants are met through such activities as the necessary vocabulary acquisition to converse with a speaker from a major insurance company, or the skills necessary to make a presentation to community participants and parents during the Program Open House. Student participants presented a panel before the Connecticut Joint Council for Economic Development.

Social needs of the group are met by hosting visitors or planning a Program party (such as the one given for a staff teacher's birthday). A cooperative exchange program with Bridgeport, Conn. (B.A.C.E. Program) for a day provided numerous and wonderful learning experiences for students. Year end picnics for student participants and Program staff were enjoyed.

Physical needs of participants are met through experiences like visiting the Hillhouse High School Business Department. There, students are taught by high school juniors a lesson in touch typing. Student participants help in a variety of ways; answering telephone calls, running projectors, and inventoring supplies. They compose bulletin displays, create video tape credits and props, and print simulated train tickets and baggage claims. Eighth grade students formed and operated four (4) student owned companies as a part of the manufacturing cluster. Products made and sold are Afro-Hair Picks, Group Photos, Wall Plaques, and Napkin Holders.

Emotional needs of participants are manifested in activities like the video tape program produced by the students. All the many emotions came into play. Anxiety, fear, pride, jealousy, hostility were experienced and recognized. T.O.R.I. groups explore feelings.

Cultural needs of many participants were met, and pride reinforced by meeting resource and advisory people; i.e., the black bank manager, and the Puerto Rican personnel director. A recent workshop in the Fine Arts/Humanities cluster was held at the Olantunji Cultural Center in Harlem, New York.

Student Assessment Techniques

The Program counselor coordinates the administration of assessment instruments, confers with students individually concerning results, and communicates related information to parents and teachers.

All students were administered:

1. Student Pre-Program Inventory (Appendix)
2. S.T.S. Youth Needs Inventory
3. Kuder Interest Inventory
4. Geist Survey

5. Cluster Pre-Tests (Appendix)
   a. Business/Office
   b. Communications/Media
   c. Health
   d. Transportation
   e. Consumer/Homemaking
   f. Environment
   g. Fine Arts/Humanities
   h. Manufacturing

Group techniques employed are Values Clarification, Simulations and Gaming, E.T.S. Deciding Program, and T.O.R.I. sessions at Quinnipiac College. Teacher Effectiveness Training for C.E.P. staff is conducted by Project B.E.S.T. of the University of Bridgeport.

Specific Cluster Technique

A typical technique, as exemplified in the Business/Office Cluster, is the role of the Math teacher who coordinates all involvement within the cluster. This person schedules the Advisory Council meetings, and plans the specific activity for each teacher's input to the cluster. For instance, the English teacher involves student participants in business letter writing, business vocabulary study, and autobiographical reading of successful contemporary business persons. The classes write, produce, and stage a play, utilizing all potential careers in dramatics. The Science teacher involves students in related activities, i.e., study of data processing, electronic circuitry, business check scanning devices, and security systems. Environmental pollution problems in the school communities are inventigated and recommendations for correction made. The Social Studies teacher facilitates experiences in applying for a position, interviewing, worker traits, labor union organization and human relations. All components and aspects of a corporation are experienced from formation, through production, sales, and liquidation. Each teacher assumes the identical role as coordinator for a specific career cluster:

Business/Office Cluster - Math Teacher
Communications/Media Cluster - English Teacher
Health Cluster - Science Teacher
Transportation Cluster - Social Studies Teacher
Consumer/Homemaking Cluster - Math Teacher
Environment Cluster - Science Teacher
Fine Arts/Humanities Cluster - English Teacher
Manufacturing Cluster - Social Studies Teacher

Materials

Three types of materials were utilized in the Program.

1. Free materials (associations, agencies, government, unions, etc.)
2. Commercially prepared materials
3. Materials prepared by Career Education Program Staff or adapted and revised by them

Free materials are generally good, but are reviewed for content, reading level, relevancy and bias.

Commercially prepared material abounds; some of it poor. N.V.G.A. guidelines for such material are consulted. All commercial material is previewed and staff decisions are made regarding purchase or rental.

Staff prepared materials are suitable to our student group and are periodically assessed for deletion, revision, or exclusion. Examples of staff prepared materials are cluster pre-tests, surveys, questionnaires, career cross-word puzzles, field trip critiques, interview forms, cluster curriculum guides, human and material resource lists, bibliography, adapted business forms, etc.

Developing local materials enhances the continuity of the Program, demonstrates to students the relationship of school skills and job skills, and shows interaction between the community and educational institutions.

Program Evaluation

The evaluation of the Program at different levels by different people was effective in providing a broad perspective.

Personnel who participated in the evaluation are:

Dr. Gerald Tirozzi, Director of Middle Schools
Earl Gordon, Supervisor of Guidance
Isadore Wexler, Supervisor of Career Education
William Beaty, Principal, Troup Middle School
Ronald Maresca, Assistant Principal, Troup Middle School
Reginald Mayo, Assistant Principal, Troup Middle School
Vincent M. Gagliardi, C.E.P. Director
Mark L. Fisher, C.E.P. Assistant Director

Evaluation techniques were effected throughout the Program from the planning phase through the implementation, trial, and long range phases. Greater effectiveness was gained through periodic evaluation by allowing student participants' needs to be met by changes in objectives and activities.

Techniques employed were: evaluation of students' participation in planned and volunteer type activities, meetings with individual program staff members, as well as the entire program staff, response and participation of parents of program students, evaluation by Troup General Staff (including Program Staff Members), Business-Industry-Government co-participants critique, formal and informal pre and post testing of student participants, administrative evaluation of operations, procedures, and activities, and finally, the Program Director's assessment of the thrust of the innovation.

These techniques have been judged successful in evaluating and communicating the critical data regarding the Program's goal and objectives.

FINDINGS AND ANALYSIS

Typical stereotypes of incoming students were in great part dispelled by the Program. The holding power of the Program is evidenced by the fact that, of over 100 seventh grade student participants, no requests for transfer out of the Program to a regular division were received from students, parents, or teachers. This is also true of approximately 90 continuing eighth grade student participants.

School suspensions for C.E.P. participants, as evaluated by Reginald Mayo, and Ronald Maresca, Assistant Principals, are significantly lower than the seventh and eighth grade averages. Referrals for behavior disorder are minimal.

Attendance for the C.E.P. eighth grade participants (Rooms 210, 213, 214, and 215) when compared with the control group (Rooms 208, 209, 211 and 212) for a period from September 3, 1974 - June 26, 1975 indicates participants in the C.E.P. attend school at a 36% higher frequency.

Attendance for the seventh grade C.E.P. participants (Rooms 313, 314, 315 and 316) when compared with the control group (Rooms 305, 306, 307, and 311) for the same period indicates participants in the C.E.P. attend school at a 40% higher frequency.

Eighth grade C.E.P. participants achieved first, second, or third academic honors during the school year at a 50% higher rate than the control group. Seventh grade C.E.P. participants achieved first, second, or third academic honors during the school year at a 55% higher rate than the control group. National Junior Honor Society recognition was made of C.E.P. participants at a 57% higher frequency than the control groups. An outstanding Puerto Rican in the Program received the Constance Baker Motley Award for being the most outstanding student in the entire seventh grade. The Martin Luther King Jr. award as the outstanding eighth grade student was awarded to a C.E.P. participant. The public image of Troup has been greatly improved through the Career Education Program.

The majority of participants are provided with increased knowledge and understanding of career opportunities. They are able to formulate and critically assess work values.

Reports of Pre and Post Testing in Career Clusters evidenced the following:

Business/Office Cluster
86% scored 60 or above on Post-Test
76% improved their score on Post-Test

Communications/Media Cluster
31% scored 60 or above on Post-Test
89% improved their score on Post-Test

Health Cluster
74% scored 60 or above on Post-Test
92% improved their score on Post-Test

Transportation Cluster
72% scored 60 or above on Post-Test
68% improved their score on Post-Test

Consumer/Homemaking Cluster
92% scored 60 or above on Post-Test
87% improved their score in Post-Test

Environment Cluster
29% scored 60 or above on Post-Test
72% improved their score on Post-Test

Fine Arts/Humanities Cluster
86% scored 60 or above on Post-Test
83% improved their score on Post-Test

Manufacturing Cluster
60% scored 60 or above on Post-Test
87% improved their score on Post-Test

Seventh grade participants who have been in the C.E.P. one year indicated an improvement in rating their capacity of abilities to do a task in two of eight items (see Appendix, Student Program Inventory, Question #1). These participants stated an improvement in rating their performance in school subjects in an average of 1.5 items of the seven surveyed (See Question #3 of the Inventory). Seventy five percent of the participants have had actual 'hands on' experiences (see Question #4 of the Inventory). Eighty-three percent of the participants are able to appraise their ability to fit into a specific career cluster (see Question #5 of the Inventory). Seventy seven percent of these participants cite plans to pursue post secondary training or education (see Question #9 of the Inventory).

Eighth grade participants who have been in the C.E.P. for two years indicated an improvement in rating their capacity of abilities to do a task in an average of 3.3 items of eight (see Appendix, Student Program Inventory, Question #1). Eighth graders indicated an improvement in rating their performance in school subjects in an average of 2.2 items of the seven surveyed (see Question #3 of the Inventory). Seventy four percent of these participants have had actual 'hands on' experiences (see Question #4 of the Inventory). Eighty-six percent of the eighth grade are able to appraise their ability to fit into a specific career cluster (see Question #5 of the Inventory). Eighty-six percent of these students, who enter high school in September of 1975, plan to seek post high school education or training (see Question #9 of the Inventory).

The majority of the Troup Middle School general staff have increased their awareness of Career Education (see Appendix, General Staff Questionnaire). One hundred percent improved familiarity with concepts of Career Education (Question #1). One hundred percent improved awareness of approaches and techniques in Career Education (Question #2). Eighty-five percent improved awareness of personnel and community resources in Career Education (Question #3). Eighty-five percent improved awareness of teaching materials and media resources in Career Education (Question #4). Eighty percent of the general staff reported improved awareness of Exemplary Career Education Program conducted at Troup Middle School. Continued and more extensive involvement of the entire staff has become apparent by this awareness.

Parents of students have become more aware of Career Education as evidenced by results of the Parent Questionnaire (see Appendix). Eighty-seven percent report knowledge of Career Education (Question #1). One hundred percent reported ability of their children to make career related decisions (Question #6). Offers of assistance by parents, indicating interest and concern for their children were received from eighty-three percent of the parents or guardians (Question #8).

The Business-Industry-Government-Education community co-participants have evaluated the Program as being one they are committed to on a continuing basis. They have indicated intentions to continue to serve on Advisory Councils, provide personnel and materials to the school, accomodate student visitations, and cooperate generally in all efforts--except cash outlay. A commitment to extend its human and material resources to other middle schools during the 1975-76 school year is witness to the fantastic support of the B.-I.-E.-G. community.

CONCLUSIONS

It may be concluded that in its second year at Troup Middle School, the Career Education Program has met its mid-range objectives. The third year projected objectives will not be known until the original participants reach grade nine in 1975-76. If they can successfully relate to existing high school career education programming, a transitional program with real essence would have been realized.

In conclusion, an effort in career education involving student participants, parents, community co-participants, school administration, and staff can be successful as demonstrated in the Troup Middle School Career Education Program.

Students respond, and in a creative way, as shown in the student owned and operated companies and video-tape presentations. Parents can and will help, as typified by Mr. Colon, who assisted on visitations. The co-participants are definitely committed. Consult Ms. Barbara Connelly of Southern New England Telephone Co. School administration and staff are completely convinced. Middle School Director, Gerald Tirozzi, endorses it for all New Haven Middle Schools.

RECOMMENDATIONS

Experience with the Program has been a very positive and educationally rewarding experience. It is recommended:

1. Career Education be an essential curriculum infusion throughout the school system in grades K-12.

2. Career Education experiences should be action oriented and should focus on people. These experiences should allow for real life situations and "hands on" exposure.

3. The thrust in Career Education should be on self-awareness and awareness of the world of work. Orientation to the major divisions of job "clusters" or job "families" should be stressed.

4. Greater involvement of community co-participants and students in planning stages be made.

5. Communication processes be continually evaluated and improved at all levels and include all participants and interested parties.

6. Recognition be given at appropriate points to deserving contributors to the Program. Morale for everyone is improved by acknowledging effort.

7. Co-operative exchanges of students be made between schools and between school systems. Experiences are educational and growth producing.

8. Careful consideration be given to prevent elitism and its effects.

9. An annual Open House, Exhibits, Exposition, Coffee-Clatch, etc. be held for students, parents, co-participants, school staff for the purpose of community expression.

10. Career Education Program involve small, representative pilot groups of students at each level.

11. Public relations be discreetly effected and skillfully prepared.

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CAREER EDUCATION PROGRAM

CALENDAR 1974-75

September, 1974	Orientation, Pre-Session Surveys
September 23 - November 1, 1974	Business and Office Cluster - 7 Environment Cluster - 8
November 4, 1974 - January 17, 1975	Communications and Media Cluster - 7 Manufacturing Cluster - 8
January 27 - March 14, 1975	Health Cluster - 7 Consumer Homemaking Cluster - 8
March 17 - May 2, 1975	Transporation Cluster - 7 Fine Arts/Humanities Cluster - 8
June, 1975	Evaluation, Post Session Surveys

STUDENT PRE-PROGRAM INVENTORY

NAME _____ DATE _____

H.R. _____

Please answer the questions below to the best of your knowledge. If you have any questions, your Career Education Teacher will help you. Thank you.

1. Please rank how you rate your capacities of abilities to do a task by writing A.A. for above average; A for average; or B.A. for below average, in the blank next to each item.

_____ Use words and ideas

_____ See forms in space

_____ Do arithmetic operations

_____ See details in objects

_____ See details in words or numbers

_____ Able to fix machines and parts

_____ Able to coordinate eyes, hands, fingers, arms, and legs

_____ Able to discriminate colors

2. Please rank how you rate your interests by drawing a circle around your top three (3) interests and by underlining your lowest interests.

Outdoor Activities

Mechanical

Figuring and Estimating Numbers

Scientific

Convincing Other People

Musical

Artistic

Writing and Books

Helping Other People

Keeping Records and Writing Letters

3. Please rank how well you have done in all areas in school by writing A.A. for above average; A for average; or B.A. for below average, in the blank next to each item.

_____ Language Arts

_____ Music

_____ Science

_____ Art

_____ Math

_____ Physical Education

_____ Social Studies

4. How much exposure have you had to "actual" work and "hands on" experiences (handling instruments, equipment, and tools)? If any, please list.

A lot _____ Some _____ A little _____ None at all _____

List experiences: _____

_____

5. How able are you to "size up" your own ability to fit into a specific "career cluster"?

Very Able _____ Somewhat Able _____ Slightly Able _____ Not at all Able____

6. What three (3) occupations do you plan to go into after you finish your education?

1. _____ 2. _____ 3. _____

7. Do you know anyone in this occupation? Yes _____ No _____

If yes, are they related to you Yes _____ No _____

If yes, how are they related? _____

_____

8. If you could go into ANY occupation (regardless of your ability or training required), which occupation would you choose?

_____

_____

9. At the present time, my plans for the future are: (check one)

_____ a. To quit high school and go to work.

_____ b. To go right to work after graduation from high school with no future education.

_____ c. To graduate from high school and enter military service and go to school in the service.

_____ d. To enter military service and go to school when I get out of the service.

_____ e. To go to a trade, technical or business school.

_____ f. To complete a community college or junior college program (degree or certificate).

_____ g. To go to a community college or junior college and transfer to a four year college.

_____ h. To go to a four year college.

_____ i. To travel for some time.

_____ j. Other (please specify) _____

_____

_____ k. No definite plans.

TROUP CAREER EDUCATION PROGRAM
GENERAL STAFF QUESTIONNAIRE

NAME_____ DATE_____
Last First M.I.

1. To what degree are you familiar with the concept of Career Education (please check):

   Full Knowledge _____ Some Knowledge_____

   Little Knowledge _____ No Knowledge _____

2. To what degree are you aware of the inter-disciplinary and enrichment approaches and techniques utilized in Career Education in the middle school classroom:

   Full Awareness _____ Some Awareness _____

   Little Awareness _____ No Awareness_____

3. To what degree are you aware of personnel resources and community visitation resources in Career Education at the middle school level:

   Full Awareness _____ Some Awareness _____

   Little Awareness_____ No Awareness_____

4. To what degree are you aware of teaching materials and media resources in Career Education at the middle school level:

   Full Awareness_____ Some Awareness_____

   Little Awareness_____ No Awareness_____

5. To what degree are you aware of the Exemplary Career Education Program being conducted at Troup Middle School this year:

   Full Awareness_____ Some Awareness_____

   Little Awareness_____ No Awareness_____

TROUP CAREER EDUCATION PROGRAM
PARENT QUESTIONNAIRE

PARENT NAME _____
Last First M.I.

STUDENT NAME _____ _____
Last First M.I. Homeroom

1. How much knowledge do you have about Career Education? (Please check one.)

   Full _____ Some _____ Little _____ None _____

2. Please check your child's interests:

   _____ Outdoor Activities
   _____ Mechanical
   _____ Figuring and Estimating Numbers
   _____ Keeping Records/Writing Letters
   _____ Convincing Other People
   _____ Scientific
   _____ Musical
   _____ Artistic
   _____ Writing
   _____ Helping Other People

3. Please list several talents or abilities your child has:

   _____ _____ _____

4. What awards or honors has your child received in clubs, church, community organizations, and school?

   _____ _____ _____

5. Please list any work experience your child has had:

   _____ _____ _____

6. To what degree is your child able to make decisions?

   Very Able _____ Somewhat Able _____ Not Able _____

7. Does your work schedule limit your assistance? Yes _____ No _____

8. Can you help your child by offering your assistance in any of the following ways? (Please check):

   _____ Making phone calls
   _____ Addressing envelopes
   _____ Accompanying field trips
   _____ Refreshment - Hospitality Committee
   _____ Sharing your work experience with students

Thank you.

BUSINESS AND OFFICE OCCUPATIONS PRE-TEST

NAME _____ DATE _____ H.R. ____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____1. A secretary is a person who

a. completes inventories
b. does office tasks.
c. takes care of the company's money.

_____2. What is the total number of clerical workers in the United States?

a. 11 million.
b. 6 thousand.
c. 200 thousand.

_____3. To work in a paid position in an office, you must be how old?

a. 16
b. 18
c. 21

_____4. What machine would be found in an office?

a. public address system
b. typewriter
c. water cooler

_____5. An insurance company protects

a. people and property.
b. snow and rain.
c. suicide.

_____6. Banking involves

a. money.
b. checks.
c. credit cards.
d. all of the above.

_____7. Office workers are generally found in

a. banks.
b. restaurants.
c. air control towers.

_____8. When you go to a job interview

a. take your friends.
b. don't ask questions.
c. dress sloppy.
d. dress neatly and ask questions about the job.

_____9. Beginning salaries for an office clerk would be about

a. $100. a week.
b. $300. a week.
c. $40.20 a week.

_____10. When you apply for a job

a. try to fool the interviewer.
b. lie about your age.
c. fill out the application as accurately as you can.

_____11. The job of a secretary includes

a. typing.
b. taking dictation.
c. answering the phone.
d. all of the above.

_____12. A key punch operator

a. punches holes in IBM cards.
b. passes out the key to the ladies room.
c. punches in on the time clock when office workers are late.
d. both (a) and (b)

_____13. A stenographer

a. takes dictation using shorthand.
b. keeps the ledger.
c. counts the money the company takes in.

_____14. A bank teller

a. counts the money.
b. records deposits and withdrawals.
c. serves as a uniform guard.
d. both (a) and (b).

_____15. A programmer

a. watches special programs on T.V.
b. writes the instructions for the computer to work.
c. types on a key punch machine.

_____16. A stockholder can

a. work in a factory.
b. receive money from the company.
c. vote on company policies.
d. all of the above.

_____17. Public Accountants are likely to specialize in

a. reviewing financial records.
b. balancing cash register tapes.
c. answering telephones.
d. programming information.

_____18. Which person schedules appointments for an employer?

a. cashier.
b. secretary.
c. bank clerk.
d. accountant.

_____19. Adding machines are used primarily by

a. office machine operators.
b. salesmen.
c. secretaries.
d. none of the above.

_____20. Computers are

a. accurate.
b. efficient.
c. time savers.
d. all of the above.

_____21. Which of the things below should a typist be able to do well?

a. do fractions.
b. crossword puzzles.
c. spell.

_____22. Wages paid according to percentage of merchandise sold:

a. salaries.
b. hourly rate.
c. commission.

COMMUNICATIONS PRE/POST TEST

NAME_____ DATE_____ HR_____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____1. Which career below is most closely a part of the communications field?

a) journalism, b) barber, c) fireman, c) nursing.

_____2. A person who runs wires and cables from central offices to the place where phones are to be installed is called a(n)

a) clerical worker, b) business machine operator, c) operator

d) lineman.

_____3. People who put new phones into homes are called

a) linemen, b) splicers, c) installers, d) switchboard operators.

_____4. Customer bills are sent by employees in what telephone company department?

a) installation, b) business, c) splicing, d) engineering.

_____5. A man in the telephone company decides to put a commercial on TV urging people to make long-distance calls. This man would work in what department?

a) engineering, b) advertising, c) maintenance, d) installation.

_____6. Manual dexterity would be important for which of the following telephone company workers?

a) accountant, b) repairman, c) personnel director, d) company

nurse.

_____7. The person who sets type in a newspaper plant is called a

a) photoengraver, b) linotype operator, c) layout man, d) copy-

writer.

_____8. A person who corrects the errors in a newspaper article is a(n)

a) proofreader, b) layout man, c) advertising man, d) corrector.

_____9. A person who gathers information on current events and writes newspaper articles is a(n)

a) reporter, b) advertising man, c) copywriter, d) photoengraver.

_____10. The person who decides which stories will be included in the daily newspaper would be the

a) newsdealer, b) editor, c) proofreader, d) advertising man.

_____11. What requirements would be most important if you wanted to be a sports writer or society editor?

a) talent in art, b) ability to operate printing presses,

c) ability to add and subtract quickly, d) a good vocabulary.

_____12. If you wanted to sell your bicycle and put that fact in the newspaper, you would call what newspaper department?

a) proofreading, b) editorial, c) publishing, d) advertising.

_____13. A person who prepares the lines that the actors have to speak is called a

a) broadcaster, b) film director, c) disc jockey, d) script writer.

_____14. The people who set up and operate the electronic equipment in a Radio or TV studio are called

a) producers, b) broadcast technicians, c) editors, d) directors.

_____15. A person who has the overall responsibility for any specific TV program is called the

a) announcer, b) producer, c) engineer, d) broadcaster.

_____16. A person who asks companies if they want a commercial on TV would work in what department?

a) production, b) film, c) advertising, d) broadcasting.

_____17. If you wanted to be an announcer, it would be most important to do which of these things well?

a) dance, b) sing, c) talk, d) impersonate others.

_____18. The person responsible for video taping a TV program is the

a) script writer, b) comedian, c) cameraman, d) advertising writer.

_____19. People who study the possible uses of a product and sometimes make surveys to study what people will buy are called

a) artists, b) research directors, c) art directors, d) salesmen.

_____20. The person who directs a company's advertising program is called the

a) chief salesman, b) advertising copywriter, c) advertising manager, d) commercial artist.

_____21. The person in an advertising company who must know different methods of printing is called the

a) research director, b) artist, c) production manager, d) copywriter.

_____22. Which of the people below would be most important to a magazine advertising agency?

a) artist, b) announcer, c) splicer, d) electronic technician

_____23. A person who wants to have a job in advertising would be well advised to take a course in

a) French, b) psychology, c) music, d) woodwork.

_____24. People who survey community residents in order to find out what they think about a certain product are involved in

a) communications research, b) market research, c) satellite research,

d) art research.

_____25. A person who would place a long-distance call for you is the

a) installer, b) cable splicer, c) operator, d) telephone engineer.

HEALTH CLUSTER
Pre-Test

NAME _____ DATE _____ H.R. _____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____ 1. A person who treats his patients primarily by manual manipulation of parts of the body, especially the spinal column is a(n)

a. Medical Technologist

b. Chiropractor

c. Optometrist

_____ 2. A person who fills cavities and extracts teeth is a

a. Dental Lab. Technician

b. Dental Hygienist

c. Dentist

_____ 3. One who plans appetizing and nutritious meals to help people maintain or recover good health is a

a. Hospital Administrator

b. Dietitian

c. Nurse

_____ 4. One who plans and directs activities designed to help mentally and physically disabled patients is a(n)

a. Occupational Therapist

b. Physical Therapist

c. Podiatrist

_____ 5. One who diagnoses, prescribes remedies, and treats diseases of the human body, paying particular attention to impairments in the musculo-skeletal system is a(n)

a. Osteopathic Physician

b. Podiatrist

c. Pathologist

Health Pre-Test Con't.

_____6. One who assists in caring for medical and surgical patients who are physically or mentally ill is a(n)

a. Hospital Attendant

b. Optometrist

c. Practical Nurse

_____7. One who investigates the causes and cures of diseases or develops diagnostic procedures is a

a. Psychologist

b. Biochemist

c. Medical Social Worker

_____8. Graduation from High School as well as Business Training is essential for the position of

a. Audiologist

b. Orderly

c. Medical Stenographer

_____9. Courses in English and Business Arithmetic provide good preparation after a High School education for a

a. Nurse's Aide

b. Rehabilitation Counselor

c. Veterinarian

_____10. A cook or chef may receive training in a

a. Vocational School

b. Technical School

c. Military Academy

_____11. In most states you must pass an examination to be licensed by the state in which you wish to practice as a

a. Receptionist

b. Nurse's Aide

c. Dental Hygienist

_____12. A Medical Technologist

a. Performs routine laboratory tests

b. Dispenses drugs and medicine

c. Takes tests to determine defects in vision

_____13. A Veterinarian works with

a. Plants
b. Human Beings
c. Animals

_____14. A Podiatrist treats

a. Diseases and deformities of the feet

b. Diseases of the spinal column

c. Diseases of the musculo-skeletal system

_____15. To practice medicine, graduation from an approved medical school and a one year hospital internship is required to be a

a. Medical Record Librarian

b. Physician

c. Speech Pathologist

_____16. The classification system most frequently used in classifying health occupational informational materials is the

a. United States Census

b. Dictionary of Occupational Titles

c. Handbook of Job Facts

_____17. Among the most important things a student should know about health occupations in which he is interested is

a. The D.O.T. number

b. The census classification

c. The latest prestige rating

d. What people in Health Occupations do

_____18. The best source to consult about present and likely future trends in health occupations is

a. Dictionary of Occupational Titles

b. U. S. Census Report

c. Occupational Outlook Handbook

_____19. The Government Agency that prepares and presents information about employment trends, job opportunities and positions open in health and related areas is the

a. State Employment Service

b. Bureau of Budget

c. Department of Manpower

TRANSPORTATION

NAME_____ Pre-Test Date_____ H.R._____

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____1. Transportation is important in the U.S. because

(a) the U.S. is a very poor nation. (b) the climate and land in the U.S. is not good for goods to be shipped easily. (c) the average American needs materials and goods that are not close by. (d) the average American needs only the goods and services he could make with his own hands.

_____2. Which person would not be a part of a transportation occupation?

(a) a pilot (b) a truck driver (c) a longshoreman (d) a psychologist.

_____3. Which subject would be most important to a pilot?

(a) science (b) art (c) history (d) gym.

_____4. A truck driver would have to know geography in order to

(a) park his truck (b) find the best route to his destination (c) be able to fix any breakdown (d) communicate back to his office.

_____5. Which persons would be most responsible for directing a transportation company?

(a) management (b) supervisors (c) drivers (d) all of the preceding a,b,c.

_____6. Most oil brought into the U.S. is carried by

(a) air (b) rail (c) pipeline (d) ship.

_____7. Africa has difficulty in transporting goods because

(a) of jungles (b) of lack of money (c) not enough people can read and write (d) of no equipment.

_____8. Which occupation is connected with shipping?

(a) longshoremen (b) flight stewardess (c) automobile salesman (d) traffic engineer.

Transportation Con't.

_____9. A person who would handle claims regarding a lost shipment would be

(a) an executive (b) a seaman (c) an import-export agent (d) an insurance expert.

_____10. What type of lawyer would a shipping company hire?

(a) an admirality lawyer (b) a divorce lawyer (c) a regular lawyer (d) a criminal lawyer.

_____11. Railroads make most of their money from shipping

(a) passengers (b) mail (c) freight (d) none of these.

_____12. A person who tries to sell his company so more people would use its services is

(a) a dispatcher (b) a chemist (c) an accountant (d) an advertising agent.

_____13. AmTrak is run by

(a) New Haven (b) Connecticut (c) New York (d) U.S.A.

_____14. The greatest number of people employed by railroads are

(a) locomotive engineers (b) clerks (c) conductors (d) station agents.

_____15. There is talk of sending oil from Alaska down to the Continental U.S. by

(a) truck (b) rail (c) ship (d) pipeline.

_____16. Merchant marines deal with

(a) armed forces (b) guns (c) transportation (d) Vietnam.

_____17. Most executive jobs require a(n)

(a) 8th grade diploma (b) H.S. diploma (c) college diploma.

Transportation Con't.

_____18. The Civil Aeronautics Board (CAB)

(a) approves airlines' rates and routes (b) tells airlines how many airplanes to build (c) hires people to act as travel agents (d) hires stewardesses.

_____19. Which person would be responsible for keeping an airplane operating in good condition?

(a) pilot (b) co-pilot (c) aircraft mechanic (d) air traffic controller.

_____20. Which person is most responsible for watching the different mechanical and electrical devises aboard an airplane?

(a) stewardess (b) traffic controller (c) co-pilot (d) flight engineer.

CONSUMER AND HOMEMAKING PRE/POST TEST

NAME_____ DATE_____ H.R._____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____ 1. A person who plans appetizing and nutritious meals is a

a. physicist
b. farmer
c. dietitian

_____ 2. The minimum educational requirement for a dietitian is a

a. Doctorate Degree
b. Masters Degree
c. Bachelors Degree

_____ 3. The economist

a. collects and interprets data on economic problems
b. pays the nuclear technician
c. does research work on state and national parks

_____ 4. The economist working for the government earns

a. $14,000 to $23,000 per year
b. $ 5,000 to $ 7,000 per year
c. $12,000 to $18,000 per year

_____ 5. A person who improves products, services, and practices that affect the comfort and well-being of the family is a

a. marine biologist
b. lawyer
c. neither

_____ 6. The largest group of home economists are

a. teachers
b. future homemakers
c. textile workers

_____ 7. A food technologist investigates

a. the chemical, physical and biological nature of food
b. suitable seed planting
c. detergents

_____ 8. Educational requirements for a statistician are

a. a bachelors degree with a major in statistics or math
b. a masters degree with a major in applied math
c. an associate degree with a major in general math

_____ 9. Some chefs learn to cook in

a. restaurants
b. special schools
c. both of the above

_____ 10. The amount of money a chef earns depends upon

a. where he works
b. the amount of education he has
c. both of the above

_____ 11. A stock clerk prevents losses in

a. sales
b. cash register receipts
c. merchandise displayed

_____ 12. A marketing research worker

a. buys materials for businessmen
b. writes instructions for computers to work
c. provides businessmen with information needed to make certain decisions

_____ 13. How many people could a chef feed with a 50 pound roast, giving each person 1/4 of a pound

a. 405
b. 300
c. 200

_____ 14. A state director of consumer affairs earns

a. $36,000 per year
b. $27,000 per year
c. $18,000 per year

_____ 15. A tailor is a person who

a. makes and alters clothes
b. washes dishes
c. repairs cars

_____ 16. Purchasing agents are generally found in

a. air control towers
b. business
c. lending institutions

_____ 17. A store manager conducts

a. consumer affairs
b. staff meetings
c. customer interviews

_____ 18. A car dealer is a person who

a. sells cars for a profit
b. reviews financial records
c. votes n company policies

_____ 19. The slaesman sold 7 cars at $6,000 each, his gross was

a. $56,000
b. $32,000
c. $42,000

_____ 20. Most jobs in the consumer-homemaking field

a. will be replaced by computers
b. will exist in the future
c. will be closed out by 1980

ENVIRONMENT PRE/POST TEST

NAME _____ DATE _____ H.R._____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____ 1. What is the population of the world today?

a. 900 million
b. 2.2 billion
c. 3.9 billion
d. 7.4 billion

_____ 2. What is the present rate of growth of world population?

a. 1 percent
b. 2 percent
c. 5 percent
d. 10 percent

_____ 3. What is the population of the U.S. today?

a. under 50 million
b. about 75 million
c. about 110 million
d. about 210 million

_____ 4. In the less developed countries

a. birth rates are high
b. death rates are high
c. literacy rates are high
d. per capita income is high

_____ 5. Which has <u>not</u> been a major cause of the population explosion?

a. modern preventive medicine
b. increase in birth rates
c. improved sanitation
d. lower infant mortality

_____ 6. Which occupation is directly involved with ecology?

a. farmer
b. forester
c. lawyer
d. truck driver

_____ 7. Which occupation requires the most schooling?

a. garbage collector
b. game warden
c. nuclear technician
d. physicist

_____ 8. Which of the following would not directly deal with water pollution?

a. fisherman
b. city planner
c. conservation technician
d. marine pollution research assistant

_____ 9. Which governmental agency is responsible for maintaining good drinking water?

a. Department of Public Safety
b. Department of Labor
c. Department of Health and Social Services
d. Internal Revenue Service

_____ 10. Which pair of agencies is most concerned with restoring the environment?

a. Office of Economic Opportunity-Housing & Urban Development
b. Office of Defense and Office of Labor
c. National Audubon Society and Zero Population Growth
d. Federal Energy Office and Commerce Department

DIRECTIONS: Write the letter of the statement in column B which best describes the word or phrase in column A in the blank at the left of column A.

Column A		Column B
_____ 11.	Forest Fire Fighter	a. Runs equipment which cleans wastewater.
_____ 12.	Draftsman	b. Does research on how plants and animals in the ocean interact with their environment.
_____ 13.	Soil Conservationist	c. Takes care of fish in an aquarium.
_____ 14.	Surveyor	d. Draws plans for buildings.
_____ 15.	Fish and Game Warden	e. Makes sure buildings are safe.
_____ 16.	Marine Biologist	f. Controls and fights fires in the forest.
_____ 17.	Traffic Engineer	g. Helps a farmer improve his crops.
_____ 18.	Aquarist	h. Takes care of the places where forest animals live.
_____ 19.	Building Inspector	i. Sees to it that timber is cut properly.
20.	City Planner	j. Measures land for all land users.
		k. Designs or develops urban land.
		l. Makes sure no animals are taken illegally by checking license of fishermen and hunters.
		m. Decides where bike lanes should be put.

FINE ARTS/HUMANITIES PRE-POST TEST

NAME_____ DATE_____ H.R.____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____ 1. Which career is most closely a part of the Fine Arts/Humanities field?

a. fireman
b. linguist
c. scientist
d. nurse

_____ 2. The director is in charge of:

a. getting sponsors
b. organizing the action
c. writing the script
d. leading the orchestra

_____ 3. An educator is required to have completed at least:

a. high school
b. elementary school
c. college
d. two year training program

_____ 4. Which of the following would you see during the performance of a play?

a. actor
b. stagehand
c. make-up man
d. writer

_____ 5. Television's advantage over other forms of expression is:

a. honesty
b. fewer interruptions
c. clarity
d. speed

_____ 6. A political scientist would most likely appear:

a. announcing a baseball game
b. acting in a play
c. running for mayor
d. reporting a news program

_____ 7. The lines that are memorized by actors are known as:

a. the story
b. the program
c. the script
d. the documentary

_____ 8. Accoustics refer to:

a. the set construction
b. production
c. the sound
d. direction

_____ 9. The job market for actors at present is:

a. better than last year
b. overcrowded
c. underemployed
d. the same as it was ten years ago

_____ 10. Technical training is required of a(n):

a. lighting specialist
b. stagehand
c. cashier
d. usher

_____ 11. Which career would be included in the Humanities?

a. doctor
b. businessman
c. clerical worker
d. archaeologist

_____ 12. Which occupation is not associated with drama?

a. actress
b. producer
c. mathematician
d. director

_____ 13. A choreographer:

a. writes the lyrics for the songs
b. directs the acting
c. supervises the stage crew
d. coordinates the dance numbers

_____ 14. An audition is:

a. a dress rehearsal
b. a script writer
c. a first run script reading for a part
d. the second row of seats behind the orchestra

_____ 15. People who coordinate and arrange home furnishings in a fashionable manner are called:

a. musicians
b. archaeologists
c. interior decorators
d. linguists

_____ 16. A tripod is:

a. film for a camera
b. a movie camera
c. the focus lens
d. a stand for the camera

_____ 17. A professional dancer needs:

a. good handwriting
b. a loud voice
c. good coordination
d. long arms

_____ 18. Performers must be able to:

a. speak clearly
b. take constructive criticism
c. memorize well
d. all of the above

_____ 19. Props refer to:

a. the proper way to do things
b. the theatre itself
c. articles used or the set
d. the director's patience

_____ 20. Fine Arts and Humanities includes:

a. physicians
b. manufacturers
c. truckers
d. none of the above

MANUFACTURING PRE/POST TEST

NAME _____ DATE _____ H.R. _____
Last First

DIRECTIONS: On the lines to the left of the questions below, write the letter of the answer which best completes the statement.

_____ 1. A person who is on management in a corporation and who is responsible for heading the corporation is a

a. secretary
b. foreman
c. President
d. salesman

_____ 2. A corporation is a group of people who must

a. get a charter to run
b. make more than $5,000 in their treasury
c. make a profit in their first year of operation
d. function only in the U.S.

_____ 3. A person who has a share in a corporation and who profits by its success is a

a. salesman
b. stockholder
c. customer
d. Vice-President

_____ 4. Which person would be part of a corporation in manufacturing

a. a doctor in private practice
b. a production supervisor of an automobile company
c. a teacher in a middle school
d. a politician in the U. S. Government

_____ 5. A person who oversees operation of product, maintaining established quality procedures to insure perfect finished products at all times is a(n)

a. Advertising Manager
b. Treasurer
c. Personnel Director
d. Quality Control Manager

_____ 6. The manufacturing industry employed in 1970 approximately

a. 2 million people
b. 8 million people
c. 12 million people
d. 19 million people

_____ 7. Which type of job would be in the operational end of a corporation

a. management
b. machinist
c. transportation supervisor

d. designer

_____ 8. Which type of job would be in the designing end of a corporation

a. marketing supervisor
b. Production Manager
c. transportation dispatcher
d. Communications Manager

_____ 9. Which would not be an asset of a large corporation

a. money owed to a large bank
b. equipment owned by the corporation
c. land owned by the corporation
d. money that the corporation has in its treasury

_____ 10. Liquidation of a corporation means

a. the corporation is flooded with water
b. the corporation has made a large profit
c. the corporation is dissolved and ceases to be
d. none of the above

_____ 11. When supply is greater than demand, prices

a. go up
b. go down
c. stay the same
d. none of the above

_____ 12. When demand is greater than supply, prices

a. go up
b. go down
c. stay the same
d. none of the above

_____ 13. Distribution of goods means

a. how goods are made
b. how much goods cost
c. where goods come from
d. how goods get from the company to the buyer

_____ 14. A company that is diversified, means the company is

a. into many different types of things
b. hiring only women
c. located in a large city
d. not producing enough goods

_____ 15. Most corporations sell stock in order to

a. get into the newspaper every day
b. get more money
c. advertise
d. send their employees on vacation

_____ 16. If you were working in the research department of a manufacturing corporation, you would be more concerned with

a. accounting and bookkeeping
b. federal and state taxes
c. finding better ways to produce your product
d. electing officers for the corporation

_____ 17. Most jobs in manufacturing require a(n)

a. college diploma
b. 6th grade diploma
c. 8th grade diploma
d. high school diploma

_____ 18. Which would not be a part of the distribution department of a corporation

a. management
b. packaging
c. marketing
d. transportation

_____ 19. If you were interested in working with advertising, you would probably take a lot of courses in

a. social studies
b. math
c. science
d. English

_____ 20. Name four large manufacturing companies that you may have heard of

a. _____

b. _____

c. _____

d. _____